



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,054	11/12/2004	Atsushi Kudo	255492US90PCT	2514
22850 7590 01/24/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER GREENE, JASON M	
			ART UNIT	PAPER NUMBER
			1724	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/502,054

Applicant(s)

KUDO ET AL.

Examiner

Jason M. Greene

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :10/25/04;2/14/05;3/2/05;5/16/05;5/24/05;4/14/06;11/15/06;11/30/06.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(a) as being anticipated by Japanese Patent Application Publication JP 2001-190916.

JP 2001-190916 discloses a honeycomb filter (10) for purifying exhaust gases which has a structure in which a plurality of columnar porous ceramic members (11) are combined with one another through adhesive layers (12), each of the columnar ceramic members comprising a number of through holes that are placed in parallel with one another in the length direction with partition walls disposed therebetween, such that said partition walls which separate said through holes function as a filter for collecting particulates, wherein the Young's modulus of the adhesive layer is set at 20% of the Young's modulus of the porous ceramic members, and the relationship between the thermal expansion coefficients of the adhesive layers and the porous ceramic members satisfies the recited relationship since the different materials used to form the adhesive

layers and the porous ceramic members have slightly different thermal expansion coefficients, and wherein a catalyst (Pt, Pd and Rh) is supported on the honeycomb filter in Figs. 1-3, the English language abstract and paragraphs [0008] to [0029] of the English language translation.

3. Claims 1-4 are rejected under 35 U.S.C. 102(a) as being anticipated by Japanese Patent Application Publication JP 2001-98936.

JP 2001-98936 discloses a honeycomb filter (22) for purifying exhaust gases which has a structure in which a plurality of columnar porous ceramic members (F1,F2) are combined with one another through adhesive layers, each of the columnar ceramic members comprising a number of through holes that are placed in parallel with one another in the length direction with partition walls disposed therebetween, such that said partition walls which separate said through holes function as a filter for collecting particulates, wherein the Young's modulus of the adhesive layer is set at 60% or less of the Young's modulus of the porous ceramic members (since the adhesive layer is formed as a paste comprising ceramic fiber and SiC powder), and the relationship between the thermal expansion coefficients of the adhesive layers and the porous ceramic members satisfies the recited relationship since the different materials used to form the adhesive layers and the porous ceramic members have slightly different thermal expansion coefficients, and wherein a catalyst (Pt, Rh, Fe, V, Au, Ag, Cu or Ce) is supported on the honeycomb filter in Fig. 7, the English language abstract and paragraphs [0026] and [0045] to [0052] of the English language translation.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application Publication EP 0 816 065 A1.

EP 0 816 065 A1 discloses a honeycomb filter (1) for purifying exhaust gases which has a structure in which a plurality of columnar porous ceramic members (2,3) are combined with one another through adhesive layers (4), each of the columnar ceramic members comprising a number of through holes (2a) that are placed in parallel with one another in the length direction with partition walls (2b) disposed therebetween, such that said partition walls which separate said through holes function as a filter for collecting particulates, wherein the Young's modulus of the adhesive layer is set at 20% of the Young's modulus of the porous ceramic members (since the adhesive layer is formed an elastic paste), and the relationship between the thermal expansion coefficients of the adhesive layers and the porous ceramic members satisfies the recited relationship since the different materials used to form the adhesive layers and the porous ceramic members have slightly different thermal expansion coefficients, and wherein a catalyst (Pt or another metallic oxidation catalyst) is supported on the honeycomb filter in Figs. 1-3 and page 3, line 36 to page 6, line 8.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Ohno et al. and Harada et al. references disclose similar honeycomb filters.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (571) 272-1157. The examiner can normally be reached on Monday - Friday (9:00 AM to 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

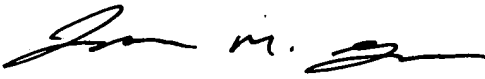
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/502,054

Page 6

Art Unit: 1724

Jason M. Greene
Primary Examiner
Art Unit 1724


1/17/07

jmg
January 20, 2007